UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,268	11/25/2003	Christiaan Steenbergen	DC-05754	6368

33438 7590 01/24/2007
HAMILTON & TERRILE, LLP
P.O. BOX 203518
AUSTIN, TX 78720

EXAMINER	
GIESY, ADAM	
ART UNIT	PAPER NUMBER
2627	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/722,268	STEENBERGEN ET AL.	
	Examiner	Art Unit	
	Adam R. Giesy	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 November 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 November 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5-12, and 16-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Gotoh et al. (hereinafter Gotoh – US Pat. No. 6,278,671).

Regarding claim 1, Gotoh discloses an optical medium disc for storing information readable by an optical disc drive, the optical medium disc comprising: a first layer having reflective properties, the first layer operable to store information through manipulation of the reflective properties by a laser (see Figure 6, element 825); a second layer disposed over the first layer (element 802); a first set of embedded information stored at the first layer within a first range of radii of the optical medium (see Figure 2A – note that data on the first layer is stored throughout the entire radius of the disc); and a second set of embedded information stored at the second layer aligned to substantially overlap the first set of information (Figure 2A – see barcode).

Regarding claim 2, Gotoh discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further having data and protective layers (see Figure 6 – note data layers are displayed as 802 and 825 and protective layers are depicted as 801 and 803), wherein the first set of embedded information comprises plural repeated subsets distributed around the entire circumference of the optical medium disc in a data

layer (note that the first data set is recorded as repeated patterns of pits around the entire circumference of the disc), and the second set of embedded information is distributed over the first set of embedded information around a portion of the circumference of the optical medium disc at the protective layer so that at least one complete subset of the first set of embedded information remains uncovered by the second set of embedded information (see Figure 30A – note that the barcode does not cover the entire circumference).

Regarding claim 5, Gotoh discloses all of the limitations of claim 2 as discussed in the claim 2 rejection above and further that the second set of embedded information comprises laser cutting over the protective layer (see Figure 2C – note that the laser cuts the pits that form the barcode).

Regarding claim 6, Gotoh discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the first set of embedded information comprises a first encoding and the second set of embedded information comprises a second encoding, the first and second sets of information operable to provide a mixed signal to an optical disc drive (see Figure 2 - note that the first set of information is composed of pits and the second set of information is composed of a barcode).

Regarding claim 7, Gotoh discloses all of the limitations of claim 6 as discussed in the claim 6 rejection above and further that the mixed signal comprises frequency modulation operable to distinguish between the first and second sets of embedded information (see Figure 2C – note that the frequency of the pits is radially uniformed in order to create the barcode).

Regarding claim 8, Gotoh discloses all of the limitations of claim 6 as discussed in the claim 6 rejection above and further that the mixed signal comprises phase encoding operable to distinguish between the first and second sets of embedded information (see Figure 47 – note that the pits on each layer are composed of two different phases).

Regarding claim 9, Gotoh discloses all of the limitations of claim 6 as discussed in the claim 6 rejection above and further that the mixed signal comprises bar coding operable to distinguish between the first and second sets of embedded information (see column 1, lines 46-53).

Regarding claim 10, Gotoh discloses all of the limitations of claim 1 as discussed in the claim 1 rejection above and further that the first set of embedded information has first width and the second set of information has a second width so that first set of embedded information is readable under the second set of embedded information (see Figure 2B – note that the first set of information is written on the first layer throughout the entire layer, while the second set of information is only written within the low reflectivity portion – element 584).

Regarding claim 11, Gotoh discloses a method for embedding information in an optical medium having plural layers, the method comprising: embedding a first set of information in a first layer at a predetermined radius of the optical medium (see Figure 48 – information can be imbedded at any given radius); embedding a second set of information in a second layer at the predetermined radius of the optical medium (see Figure 2A – second information is imbedded within the low reflectivity portion 584);

inserting the optical medium in an optical medium drive (see Figure 15); and initiating the optical drive to use the optical medium by bringing the optical drive read head to the predetermined radius and reading the first and second sets of information (performed by drive depicted in Figure 15 – see also element 827).

Regarding claim 12, Gotoh discloses all of the limitations of claim 11 as discussed in the claim 11 rejection above and further that the method also includes embedding the first set of information further comprises storing the first set of information as plural repeated subsets around the circumference of the optical medium at the predetermined radius (see Figure 48 - note that the first data set is recorded as repeated patterns of pits around the entire circumference of the disc); and embedding the second set of information further comprises storing the second set of information substantially aligned to cover the first set of information over part of the circumference of the optical medium so that at least one of the repeated subsets of the first set of information remains uncovered (see Figure 30A – note that the barcode does not cover the entire circumference).

Regarding claim 16, Gotoh discloses all of the limitations of claim 11 as discussed in the claim 11 rejection above and further that the first and second set of information are modulation coded to output a mixed signal (see Figure 2 - note that the first set of information is composed of pits and the second set of information is composed of a barcode).

Regarding claim 17, Gotoh discloses an information handling system (Figure 15) comprising: components operable to generate information for storage on an optical

medium (see Figure 15); an optical drive interfaced with the components and operable to accept the information for storage on the optical medium (Figure 15, elements 17 and 17a); a pick-up head associated with the optical drive and operable to read reflected laser light from the optical medium (Figure 15 - shown as a square with a triangle atop it but not labeled); and an optical media identification module interfaced with the pickup head and operable to determine identification information read from first and second aligned embedded information areas, the first embedded information area in a first layer of the optical medium, the second embedded information area in a second layer of the optical medium (Figure 15, elements 750 and 827).

Regarding claim 18, Gotoh discloses all of the limitations of claim 17 as discussed in the claim 17 rejection above and further that the first embedded information area comprises a data layer between first and second radii (see Figures 2 and 6 – the first layer can be recorded between the inner radius and the outer radius of the disc) and the second embedded information area comprises a protective layer between the first and second radii (see Figure 2).

Regarding claim 19, Gotoh discloses all of the limitations of claim 18 as discussed in the claim 18 rejection above and further that the first and second aligned embedded information areas output a frequency modulated mixed signal that the optical media identification module demodulates to read first and second embedded identification information sets (see Figure 2 - note that the first set of information is composed of pits and the second set of information is composed of a barcode).

Regarding claim 20, Gotoh discloses all of the limitations of claim 18 as discussed in the claim 18 rejection above and further that the first and second aligned embedded information areas output a phase encoded mixed signal that the optical media identification module demodulates to read first and second embedded identification information sets (see Figure 2 - note that the first set of information is composed of pits and the second set of information is composed of a barcode).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 3, 4, 13, 14, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gotoh et al. (hereinafter Gotoh – US Pat. No. 6,278,671).

Regarding claim 3, Gotoh discloses all of the limitations of claim 2 as discussed in the claim 2 rejection above. Gotoh further discloses that the second set of embedded information is distributed over less than one third of the circumference of the optical medium disc (see Figure 30A – the barcode covers less than one third of the entire surface layer of the first data layer). Gotoh does not disclose that the first set of information comprises eight subsets of repeated information.

It would have been an obvious matter of design choice to make eight subsets of repeated information instead of the repeated information composed of data pits since the applicant has not disclosed that eight subsets solves any stated problem or is for

any particular purpose and it appears that the invention would perform equally well with repeated patterns of engraved pits as taught by Gotoh (see Figure 48).

Regarding claim 4, Gotoh discloses all of the limitations of claim 2 as discussed in the claim 2 rejection above. Gotoh further discloses that the second set of embedded information is written through the protective layer. Gotoh does not disclose that the second set of information is comprised of ink marking over the protective layer.

It would have been an obvious matter of design choice to make the barcode in non-reflective ink instead of using pits since the applicant has not disclosed that ink markings solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with an engraved pit-formed barcode as taught by Gotoh (see Figure 2C).

Regarding claim 13, Gotoh discloses all of the limitations of claim 12 as discussed in the claim 12 rejection above. Gotoh further discloses that the second set of embedded information is distributed over less than one third of the first set of information (see Figure 30A – the barcode covers less than one third of the entire surface layer of the first data layer). Gotoh does not disclose that the first set of information comprises eight subsets of plural repeated information.

It would have been an obvious matter of design choice to make eight subsets of repeated information instead of the repeated information composed of data pits since the applicant has not disclosed that eight subsets solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with repeated patterns of engraved pits as taught by Gotoh (see Figure 48).

Regarding claim 14, Gotoh discloses all of the limitations of claim 11 as discussed in the claim 11 rejection above. Gotoh does not disclose stamping the data into the first layer.

It would have been an obvious matter of design choice to stamp the information into the first layer from a master instead of to write the information into the data layer with a laser since the applicant has not disclosed that stamping the data solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with laser written data as taught by Gotoh (see Figure 1).

Regarding claim 15, Gotoh discloses all of the limitations of claim 14 as discussed in the claim 14 rejection above. Gotoh does not disclose that the second set of information is comprised of ink marking onto the protective layer.

It would have been an obvious matter of design choice to make the barcode in non-reflective ink instead of using pits since the applicant has not disclosed that ink markings solves any stated problem or is for any particular purpose and it appears that the invention would perform equally well with an engraved pit-formed barcode as taught by Gotoh (see Figure 2C).

Response to Arguments

5. Applicant's arguments, see Remarks, filed 11/6/2006, with respect to the rejection(s) of claim(s) 1, 11, and 17 under 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gotoh et al. (see rejections above).

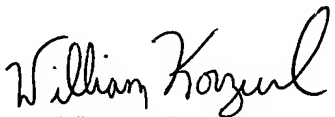
Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam R. Giesy whose telephone number is (571) 272-7555. The examiner can normally be reached on 8:00am- 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William R. Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ARG 1/18/2007



WILLIAM KORZUCH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600